

REMARKS

Claims 1-19 are pending in the application. Claims 1-19 are rejected. The Examiner's rejections are addressed below in substantially the same order as in the office action.

The Examiner noted that the language of claim 1: "non-ionic alkyloxylated diol is such that the percentage of free isocyanate " appears to have misspelled "alkoxylated". The misspelling noted by the Examiner has been corrected.

Claim Rejections - 35 USC § 103

The Examiner has divided the Rejections as follows:

Obviousness Rejection I

Claims 1-3 and 5 stand as rejected under 35 U.S.C. 103(a) as being unpatentable over Baumbach et al ('536) in view of Buter et al (WO 97119120) or in the alternative Ishiyama et al ('867).

Regarding claims 1-3 and 5: The Examiner notes that this rejection has been previously set forth in paragraphs 2-4 of the non-final rejection mailed 8/20/2008.

Regarding the newly present limitation of claim 1, which requires an NCO content between 3 and 10 wt%, Baumbach et al teach NCO contents in examples 1 and 2 of 6.85 wt% and 8.42 wt%, which coincide with the claimed range.

Obviousness Rejection II

Claims 4 and 15-19 stand as rejected under 35 U.S.C. 103(a) as being unpatentable over Baumbach et al ('536) in view of Buter et al (WO 97119120) or in the alternative Ishiyama et al ('867) in further view of Reiff et al ('737).

Regarding claims 4 and 15-19: The Examiner notes that the rejection has been previously set forth in paragraphs 5-9 of the non-final rejection mailed 8/20/2008.

Obviousness Rejection III

Claims 1-3,5-7,11-14 stand as rejected under 35 U.S.C. 103(a) as being unpatentable over Jonderko et al (*2002/0061999*) in view of Buter et al (WO 97119120) or in the alternative Ishiyama et al ('867).

Regarding claims 1-3,5-7, and 11-14: The Examiner notes that the rejection has been previously set forth in paragraphs 10-12 of the non-final rejection mailed *812012008*.

Regarding the newly present limitation of claim 1, which requires an NCO content between 3 and 10 wt%, Onderko et al teach NCO contents in examples 1 and 2 of 7.8 and 7.7 wt% which coincide with the claimed range.

Obviousness Rejection IV

Claims 4, 8-10 and 14-19 stand as rejected under 35 U.S.C. 1.03(a) as being unpatentable over Jonderko et al (*2002/0061999*) in view of Buter et al (WO 97119120) or in the alternative Ishiyama et al ('867) and in further view of Reiff et al ('737).

Regarding claims 4, 8-10, and 14-19: The Examiner notes that the rejection has been previously set forth in paragraphs 13-17 of the non-final rejection mailed *812012008*.

Regarding Rejections I and II:

Claims 1-3 and 5 stand as being unpatentable over Baumbach et al ('536) in view of Buter et al (WO 97119120) or in the alternative Shiyama et al ('867); and claims 4 and 15-19 as being unpatentable over Baumbach et al ('536) in view of Buter et al (WO 97119120) or in the alternative Ishiyama et al ('867) in further view of Reiff et al ('737).

The Examiner states that the applicants argued that the claimed invention is not rendered obvious by the prior art because Baumbach et al fail to teach an equivalent ratio of free NCO to blocking

compound that is greater than 1. The Examiner notes that claim 1 is not limited to this ratio and therefore applicants' remarks are not persuasive since they are not commensurate in scope with the rejected claims.

The Applicants have amended claim 1 to include this limitation. A basis in the specification may be found in the paragraph bridging pages 5 and 6. The Applicants respectfully assert that Claims 1-3 and 5 are now in condition for allowance.

Regarding Rejections III and IV

Claims 1-3, 5-7, 11-14 stand as being unpatentable over Jonderko et al (*2002/0061999*) in view of Buter et al (WO 97119120) or in the alternative Ishiyama et al ('867). Claims 4, 8-10 and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonderko et al (*2002/0061999*) in view of Buter et al (WO 97119120) or in the alternative Ishiyama et al ('867) and in further view of Reiff et al ('737).

During the Examiner's discussion of the Applicants' arguments, the examiner noted the following:

- 1) Buter et al teach numerous hydrophilic polyethers, however as discussed in paragraph 3 of the non-final rejection mailed 8/20/2008 herein incorporated by reference, Buter et al exemplify suitable polyethers consisting of Tegomer D-3123, D-3409, and D-3403; and
- 2) The claimed invention has been rejected over Jonderko et al *in view of* Buter et al/Ishiyama et al and **NOT** Buter et al/Ishiyama et al in view of Jonderko et al. [Emphasis provided by the Examiner]

In 2008, The Board Of Patent Appeals And Interferences in Ex parte HEIKE HATTENDORF, JUERGEN WEBELSE, HANS-JOACHIM BALKE, and MICHAEL ECKHARDT, 2008 Pat. App. Lexis 23, set forth, the standards for rejecting claims as obvious. The relevant paragraph read:

A claimed invention is unpatentable if the differences between it and the prior art are "such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. § 103(a) (2000); *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1734 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 13-14 (1966). Under 35 U.S.C. § 103, the factual inquiry into obviousness requires a determination of: (1) the scope and content of the prior art;

(2) the differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) secondary considerations such as evidence of unexpected results. *See Graham v. John Deere Co.*, 383 U.S. at 17-18. "[A]nalysis [of whether the subject matter of a claim is obvious] need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 127 S. Ct. at 1740-41, quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). However, the analysis supporting obviousness should be made explicit and **should "identify a reason that would have prompted a person of ordinary skill in the [art] to combine the elements" in the manner claimed.** *KSR*, 127 S. Ct. at 1741.

The Examiner has not identified a reason that would lead one of ordinary skill in the art to combine Jonderko with the other references. There are a number of reasons for this. The Examiner has designated Jonderko as his primary reference. The purpose of Jonderko is set forth at paragraph [0014]:

In contrast to the conventionally prepared dispersions, the **pulverulent**, water-dispersible, blocked polyisocyanate adducts of the present invention affords the decisive advantage of virtually unrestricted storage stability. Since conversion into the dispersion form does not take place until shortly before use or shortly before dispatch, it is possible to circumvent the storage stability problems of conventionally prepared dispersions.

In short, the Jonderko invention is a powder! Further it is touted as a composition that is advantageously not shipped with water and needs not be stable as a dispersion.

In marked contrast, at line 1 on page 1 of the present application, the purpose of the present invention is set forth clearly: "[t]he present Invention relates to a process for the preparation of stable aqueous dispersions of non-ionic blocked polyisocyanates and to the dispersions obtained thereby." Jonderko is directed to powdered adducts in the present invention is directed to stable dispersions. These are two very different concepts. One of ordinary skill in the art would not start with an inherently unstable compound and then try to make it stable.

The examiner uses the secondary references simply as a source of polyethers. But other than teaching that such polyethers are extant, what would lead one of ordinary skill in the art to combine the polyethers of the secondary references with Jonderko?

For example, Buter is directed to ionic sulfonated polyurethanes, and there is nothing in this suggestion that the diols alone would confer dispersibility and stability. The difference between the inherent dispersibility of sulfonated polyurethanes and the non-ionic blocked polyisocyanates alone would render suspect any such hypothesis and thereby require undue experimentation.

Similarly, Ishiyama is directed to an aqueous dispersion of an aqueous polyurethane having an ionic functional group, polyoxyethylene units and terminal hydrazine functional groups. There is no clear teaching or suggestion within this reference that would lead one of ordinary skill in the art to combine the diols listed herein within the powders of Jonderko to produce the stable dispersions of the present application.

The Examiner's primary reference is for powders that do not form stable dispersions. The Examiner's secondary references are for compounds other than non-ionic blocked polyisocyanates that, while forming stable dispersions, have many elements that may or may not contribute to the stability of the subject compounds and in no way teach or suggest that any of those elements would do the same with the very different compounds of the present application. It is respectfully submitted that all of the claims, as now amended are in condition for allowance.

CONCLUSION

The Applicants respectfully assert that all rejections have been overcome and an allowance of all claims is requested. This response is filed with a Request for Continued Examination and Petition for extension of time. The Commissioner is hereby authorized to charge the fees for the Request for Examination and the Petition for 3 months extension to Deposit Account No. **50-4920 (LSP-1011US)**. The Commissioner is also authorized to charge any under payment or credit any over payment to Deposit Account No. **50-4920 (LSP-1011US)**.

Respectfully submitted,

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